

AMENDMENTS TO THE CLAIMS

(IN FORMAT COMPLIANT WITH THE REVISED 37 CFR 1.121)

Please add claims 23-27.

1. (CURRENTLY AMENDED) An apparatus comprising:

an interface connectable to a network; and

a node configured (i) as an add/drop device for said network, (ii) to transport a plurality of packets having a plurality of protocols within a frame on said network through said interface, ~~and~~ (iii) to drop at least one of said packets from said frame and (iv) to add a header to each of said packets, wherein said frame comprises (a) a packet envelope to hold said packets and (b) a label having information specifying that at least two of said protocols are used in said packet envelope.

2. (CANCELED)

3. (PREVIOUSLY PRESENTED) The apparatus according to claim 1, wherein said node comprises a SONET/SDH add/drop multiplexer.

4. (ORIGINAL) The apparatus according to claim 1, wherein said frame is further configured to optimize a bandwidth of said apparatus.

5. (PREVIOUSLY PRESENTED) The apparatus according to claim 1, wherein said network comprises a fiber optic network.

6. (PREVIOUSLY PRESENTED) The apparatus according to claim 1, wherein said network comprises one of a Synchronous Optical Network frame and a Synchronous Digital Hierarchy fiber optic network.

7. (CANCELED)

8. (CANCELED)

9. (PREVIOUSLY PRESENTED) The apparatus according to claim 1, wherein said packets are selected from a group consisting of (i) Internet Protocol packets, (ii) Packet-Over-SONET/SDH packets, (iii) Point-to-Point Protocol packets, (iv) Asynchronous Transfer Mode cells, (v) G.702-based Plesiochronous Digital Hierarchy packets, and (vi) Frame Relay packets.

10. (PREVIOUSLY PRESENTED) The apparatus according to claim 1, wherein said network is selected from a group consisting of a point-to-point network and a Wavelength Division Multiplexing network.

11. (PREVIOUSLY PRESENTED) The apparatus according to claim 1, wherein said node is further configured to determine a

reusability of each of said packets within said frame received at said interface.

12. (PREVIOUSLY PRESENTED) The apparatus according to claim 11, wherein said node is further configured to determine said reusability of each of said packets in response to a reuse bit.

13. (CURRENTLY AMENDED) The apparatus according to claim 12, wherein each of said ~~packets comprise a payload header~~ headers is configured to store said reuse bit.

14. (PREVIOUSLY PRESENTED) The apparatus according to claim 1, wherein said node is selected from the group of (i) terminal multiplexers and (ii) SONET/SDH add/drop multiplexes, (iii) data-aware SONET/SDH add/drop multiplexers and (iv) digital cross-connects.

15. (CANCELED)

16. (CURRENTLY AMENDED) A method for transporting a plurality of packets having a plurality of protocols within a frame, comprising the steps of:

(A) adding at least one new packet having one of said protocols to said packets in said frame;

(B) dropping at least one of said packets in said frame;
and

(C) identifying a data type of a payload in each of said packets from a ~~packet~~ header ~~in~~ added to each of said packets.

17. (CANCELED)

18. (PREVIOUSLY PRESENTED) The method according to claim 16, wherein said new packet is selected from a group consisting of (i) Internet Protocol packets, (ii) Packet-Over-SONET/SDH packets, (iii) Point-to-Point Protocol packets, (iv) Asynchronous Transfer Mode cells, (v) G.702-based Plesiochronous Digital Hierarchy packets and (vi) Frame Relay packets.

19. (PREVIOUSLY PRESENTED) The method according to claim 16, further comprising the step of:

determining a reusability of each of said packets.

20. (CURRENTLY AMENDED) The method according to claim 19, wherein said determining is further in response to a reuse bit in ~~a~~ said header ~~in~~ added to each of said packets.

21. (CANCELED)

22. (CANCELED)

23. (NEW) An apparatus comprising:

a plurality of nodes configured to interface to a network, wherein each of said nodes is configured to generate a frame on said network comprising a plurality of packets having a plurality of different protocol received through a plurality of interfaces.

24. (NEW) The apparatus according to claim 23, wherein said nodes are further configured as add/drop multiplexers for said network.

25. (NEW) The apparatus according to claim 23, wherein said network comprises one of a Synchronous Optical Network frame and a Synchronous Digital Hierarchy fiber optic network.

26. (NEW) The apparatus according to claim 23, wherein each of said nodes is further configured to frame each of said packets received through said interfaces using a modified Simple Data Link protocol framing.

27. (NEW) The apparatus according to claim 26, wherein said nodes are further configured to determine a reusability of each of said packets in response to a reuse bit in said modified Simple Data Link protocol framing.